Claims

1. A plate package (10) for a heat exchanger device including a tank (1), which forms a substantially closed inner space (2) and which includes an inner wall surface (3) facing the inner space, wherein the tank (1) is arranged to be provided in such a way that a sectional plane (p), which extends through the plate package (10) and the inner space of the tank (1), is substantially vertical, wherein the plate package (10) is arranged to be provided in the inner space (2) and includes heat exchanger plates (11) provided adjacent to each other, wherein each heat exchanger plate (11) has a main extension plane (q) and is provided in such a way that the extension plane (q) is substantially perpendicular to said sectional plane (p), wherein the heat exchanger plates (11) form first plate interspaces (12), which are substantially open to the inner space (2) and arranged to permit circulation of said medium from the lower part space (2') upwardly to the upper part space (2''), and second plate interspaces (13), which are closed to the inner space (2) and arranged to permit recirculation of a fluid for evaporating the medium, wherein the first plate interspaces (12) in an upper portion (31) of the plate package (10) form outlet channels (34) for the medium,
wherein each heat exchanger plate (11) includes a first porthole and a second porthole (15) and
wherein the first portholes (14) form an inlet channel for said fluid to the second plate interspaces (12) and the second portholes (15) form an outlet channel for said fluid from the second plate interspaces (13),
characterised in that each heat exchanger plate includes an elongated distribution element (25) extending into the adjacent second plate interspace (13) and substantially transversally to said sectional plane (p).

2. A plate package according to claim 1, characterised in that the distribution element (25) is formed through a shaping of the heat exchanger plate (11), wherein this shaping forms a projection

extending into the adjacent second plate interspace (13) and a depression extending from the adjacent first plate interspace (12).

3. A plate package according to claim 1, characterised that the distribution element (25) is formed by a rod-like insert which is provided in the second plate interspace (13).

4. A plate package according to any one of claims 1-3, characterised in that the plate package in addition to said upper portion (31) includes a lower portion (33) and an intermediate portion (32), wherein the first portholes (14) are provided in the proximity of the lower portion (33) and the second portholes (15) in the proximity of the upper portion (31).

5. A plate package according to claim 4, characterised in that said portions (31-33) include a respective corrugation of the ridges and valleys, and wherein the corrugation of the intermediate portion (32) extends in at least one direction of one of said plates and in at least another direction of an adjacent plate (11) in such away that the corrugations of adjacent plates (11) cross each other in the intermediate portion (32).

6. A plate package according to any one of claims 1-5, characterised in that the sectional plane (p) intersects the first porthole (14) and the second porthole (15).

7. A plate package according to any one of claims 1-6, characterised in that the distribution element (25) is provided substantially in the middle between the first porthole (14) and the second porthole (15).

8. A plate package according to any one of claims 1-7, characterised in that each heat exchanger plate has an upper edge (41), a lower edge (42) and two side edges (43, 44), wherein the distribution element (25) is located substantially in the middle between the upper edge (41) and the lower edge (42), and in the middle between the two side edges (43, 44).

9. A plate package according to claim 8, characterised in that the distribution element (25) has such a length that the closest distance (C) to each of the side edges (43, 44) is equal to 0,7 to 1,0 * the distance (A) to the upper edge (41).

10. A plate package according to any one of claims 7 and 8, characterised in that the distribution element (25) has an intermediate portion (51) and two outer portions (52, 53) which extend from the intermediate portion (51) to a respective side edge (43, 44).

11. A plate package according to claim 10, characterised in that at least one of the outer portions (52, 53) has an inclination upwardly towards the upper edge (41).

12. A plate package according to any one of claims 10 and 11, characterised in that the intermediate portion (51) from the two outer portions (52, 53) is inclined upwardly towards the upper edge (41).

13. A plate package according to any one of claims 1-12, characterised in that the distribution element (25) includes at least one interruption (36) forming a passage for said fluid through the distribution element (25).

14. A plate package according to any one of claims 1-13, characterised in that the upper part space (2'') is designed in such a way that said outlet channels (34) extend in such a direction that the medium is guided outwardly from a central part of the plate package.

15. A plate package according to any one of claims 1-14, characterised in that said outlet channel (34) extends obliquely upwardly and outwardly from said sectional plane.

16. A plate package according to claim 15, characterised in that said outlet channels (34) extend at an angle (a) that is 30 to 60° in relation to said sectional plane.

17. A plate package according to claim 16, characterised in that said angle (a) is about 45°.

18. A plate package according to any one of claims 1-17, characterised in that the plate package (10) has an upper side, a lower side and two opposite transverse sides, and is provided in such a way in the inner space (2) that the plate package, substantially, is located in the lower part space (2') and that gap-like recirculation channels (19) are formed between the inner wall surface and the respective transverse side.